Reel # 132
Fil'Kina, K.T.

begin

MAYDANOVICH, V.P.; TARNAVSKIY, K.F.; FIL'KINA, K.T.

Results of work with Ploskirev's medium containing synthomycin in the examination of subjects having suffered gastrointestinal in ctions. Zhur. mikrobiol. epid. 1 immun. 32 no.7:127-128 Je '61.

(MIRA 15:5)

1. Iz Krasnokamskoy sanitarno-epidemiologicheskoy stantsii.
(DIGESTIVE ORGANS--DISEASES)   (CHLORMYCETIN)
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

FIL'KINA, V., inzhener.

Circulatory grain drying on the "Kuzbass" mobile grain drier.
Muk.-elev.prom. 20 no.2:25-26 F '54.   (MLRA 7:7)

1. Moskovskaya normativno-issledovatel'skaya stantsiya Zagot-
zerno.
      (Grain--Drying)

FIL'KINA, V., inzhener.

Mechanical device for weighing a load of grain in sacks. Muk.-elev.
prom. 20 no.8:23 Ag '54.   (MLRA 7:9)
        (Grain handling) (Scales (Weighing instruments))

FIL'KINA, V., inzhener.

Cleaning seed grain in winnower-graders. Muk.-elev.prom.
23 no.3:26 Mr '57.   (MLRA 10:5)

1. Moskovskaya normativno-issledovatel'skaya stantsiya.
            (Grain--Cleaning)

FIL'KINA, V.

Separating difficultly removable impurities from peas and buckwheat.
Muk. elev. prom. 23 no.12:23 D '57.   (MIRA 11:2)

1. Moskovskaya normativno-issledovatel'skaya stantsiya.
          (Peas--Cleaning)   (Buckwheat--Cleaning)

FILKINA, Ye.A.; GRIGOR'YEVA, V.G., red.

[Chemical preservation of feeds; a bibliographical list
of Soviet literature] Khimicheskoe konservirovanie kor-
mov; bibliograficheskii spisok otechestvennoi literatury.
Moskva, 1964. 15 p.   (MIRA 18:3)

1. Moscow. TSentral'naya nauchnaya sel'skokhozyaystvennaya
biblioteka. Spravochno-bibliograficheskiy otdel.

1. FIL'KO, A. I.   BALEZIN, S. A.   BELINOV, P. S.

2. USSR (600)

4. Plants - Nutrition

7. Effect of nitrogen in nutrition on the accumulation of rubber and on the
    physicochemical properties of Kok-Saghyz rubbers. Uch. zap. Mosk. ped.
    inst. im. Len. 44, 1947.

9. Monthly List of Russian Accessions, Library of Congress, January   1953, Unclassified.

AUTHOR: Fil'ko, A. I.

TITLE: On the Joint Effect of a Sulfide and Amine or the Rate of Dissolution
and the Electrode Potential of Steel in Sulfuric Acid (O sovmestnom
vliyanii sul'fida i amina na skorost' rastvoreniya i elektrodnyy
potentsial stali v sernoy kislote)

ABSTRACT: A study was made of the effect of S^{2-} on the rate of dissolution of
St-20 grade steel in 2N H_2SO_4 in the presence of corrosion inhibitors
(diethyl aniline and para-toluidine). It was established that the addi-
tion of small amounts of Na_2S (up to 0.1 millimole/liter) has practi-
cally no effect on the rate of corrosion and the stationary E of steel,
but the initial E of steel is displaced into the zone of negative values.
In presence of greater amounts the corrosion rate increases up to
100% (when the Na_2S content is increased up to 20 millimole/liter),
while the initial E becomes wholly irregular. After the electrode has
been kept in the acid under these conditions for a certain period of
time, the E is displaced into the zone of positive values, but the

Card 1/2

On the Joint Effect of a Sulfide and Amine on the Rate of Dissolution (cont.)

steady-state E is still more negative than the E of steel in acid containing diethyl aniline. The addition of Na_2S in amounts of up to 0.1% or >1 millimole/liter to H_2SO_4 containing diethyl aniline decreases the rate of corrosion more than does diethyl aniline alone, and the stationary E in this case is slightly displaced toward more negative values. With an increase in the diethyl-aniline content a smaller amount of Na_2S is required for the increase of the inhibition effect (in the presence of 20, 100, and 200 millimoles/liter of diethyl aniline the amount of Na_2S required is 5, 0.5, and 0.1 millimoles/liter, respectively). The process of the inhibition of corrosion with a mixture of Na_2S and amines is related to the predominant inhibition of the anodic reaction, which fact is confirmed by the polarization curves. Similar regularities are observed also with other amines, in particular with para-toluidine. It was also established that with an increase of the protective action of the amine, a smaller amount of Na_2S is required to attain the maximum possible protection in the above mixture. The increase in the inhibition effect upon the addition of Na_2S is related to both the increase in the adsorption of the organic cations by the metallic surface in the presence of HS^- and S^{2-} ions, and the strengthening of the bond of the HS^- and S^{2-} ions with the surface atoms of Fe by the adsorbed amine. Bibliography: 26 references.

V. P.

Card 2/2

FIL'KO, A.I.

Effect of thiourea on the solution of steel in sulfuric acid.
Uch. zap. MGPI no.146:62-91 '60.   (MIRA 15:4)
                (Urea) (Steel) (Solubility)

14(5)   SOV/132-59-8-3/18

AUTHOR: Fil'ko, A.S.

TITLE: On the Selective Grinding of Core Samples in the
               Prospecting of Stockwork Deposits

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 8, pp 13-17 (USSR)

ABSTRACT: The Inkur wolfram stockwork of the Dzhida molybde-
               num-wolfram deposits (Buryat-Mongol'skaya ASSR) is
               associated with a mass of quartz diorites and the
               mineral – the hübnerite – is equally distributed
               in a system of veins especially developed in a zone
               of intensive crushing by the enclosing rocks. The
               hübnerite is usually associated with quartz and
               quartz-sericite veins. During the process of pro-
               specting with chilled shot core drilling, the core
               breaks in places where the veins contact the en-
               closing rocks, or in zones of intensive crushing.
               The "selective" grinding of the core occurs in these
               places. The author considers two types of core
Card 1/3   breakage: diagonal, or transversal cleaving in re-

SOV/132-59-8-3/18

On the Selective Grinding of Core Samples in the Prospecting of
Stockwork Deposits

lation to the axis of the core. In diagonal cleav-
ing, only a crumbling of the core occurs. In trans-
versal cleaving (disruption) of the core-sample,
caused by the rotation of the drilling device, the
two parts of the severed core grind each other.
As a result of extensive experiments (table 1 and
graph 2) the author established that: 1) the selec-
tive grinding and crumbling directly depends on the
angle formed by the vein and the axis of the core
sample under conditions of analogous physical pro-
perties of veins and enclosing rocks (the more acute
the angle - the less the selective grinding) - there-
fore the usual orientation of bore hole perpendicu-
lar to vein is unsuitable in the stockwork type of
deposit; 2) the selective grinding depends on the
character of the contact of the vein with the en-
Card 2/3   closing rock (veins with tectonic contact are ground

SOV/132-59-8-3/18

On the Selective Grinding of Core Samples in the Prospecting of Stockwork Deposits

faster than those with "soldered" contact); 3) the use of chilled shot core drilling is advisable on- ly if the bore hole forms an acute angle with the basic mass of veins. If an intensive selective grinding occurs, the percussion drilling method must be adapted. There are 1 set of diagrams, 1 table, and 1 graph.

ASSOCIATION: Dzhidinskaya geologicheskaya ekspeditsiya (the Dzhida Geological Expedition)

Card 3/3

FIL'KO, A.3.; KHULUGUROV, M.N.; TENTILOV, S.S.

Method of studying stockwork deposits in the Dzhidinskiy ore
field. Sov. geol. 4 no.3:44-55 Mr '61.   (MIRA 14:5)

1. Dzhidinskaya geologicheskaya ekspeditsiya.
                    (Ores--Sampling and estimation)

FIL'KO, A.S.; TENTILOV, S.S.

Analyzing the pattern arrangement of a test area in a molybedenum deposit. Razved. i okh. nedr 27 no.2:27-32 F '61.   (MIRA 14:5)

1. Dzhidinskaya geologicheskaya ekspeditsiya.
(Prospecting)

FIL'KO, A.S.

Adjusted coefficient for cure samples in prospecting for stockwork molybdenum deposits. Razved. i okh. nedr 27 no.12:16-24 D '61.
(MIRA 15:3)

1. Orekitkanskaya kompleksnaya geologicheskaya partiya.
(Molybdenum ores) (Core drilling)

BOL'SHAKOV, V.V.; FIL'KO, A.S.

Core drilling with the inverse flushing of borehole bottoms for increasing the yield of cores and obtaining guide borings. Izv. vys.ucheb.zav.; geol.i razv. no.2:83-94 F '62.   (MIRA 15:3)

1. Moskovskiy geologorazvedochnyy institut imeni Ordzhonikidze.
(Core drilling)

GORDON,R.K.; FIL'KO, G.S.

Scientific conference of young specialists in the research institutes of the tire industry. Kauch.i rez. 19 no.6:57 Je '60.

(MIRA 13:6)

(Tires, Rubber)

BIDERMAN, V.L.; PUGIN, V.A.; FIL'KO, G.S.

Deformation and stresses in the rubber coating of the side strips of type "P" tires. Kauch. i rez. 24 no.7:15-17 Jl '65.

(MIRA 18:8)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

BIDERMAN, V.L.; PUGIN, V.A.; FIL'KO, G.S.

Fatigue endurance characteristics of the rubber-cord tire
structure. Kauch. i rez. 24 no.12:29-31 '65.

(MIRA 18:12)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

CZECHOSLOVAKIA
30 Sep 63

FILKORN, Vojtech
_____

Prof, Dr; rector, Komensky University, head of a
        delegation, left for Krakow, Poland, to aparticipate
        in the commemoration of the 600th anniversary
        of the foundation of Jagiello University,
        Bratislava, 30 September.

Pravda, Bratislava, 1 Oct 63, p 4.

                                        (1)

FILKOV,E., inzh., k.t.n.

Temporary relaying television network in operation. Radio
i televiziia 12 no.4:112-115 '63

1. Chlen na Redaktsionnata kolegiia, "Radio i televiziia".

FILKOV, Em., k.t.n., inzh.

Colorimetric bases for constructing a colored television system.
Radio y televiziia 13 no.10:306-308 '64.

FILKOV, E., inzh.,kand. tekhn. nauki

Peculiarities of television reception outside the zone
of optical visibility. Radio i televiziia 13 no.8:244-
246 '64.

MARKOV, G.; FILKOV, L.

    The grandiose Rabisha Cave. Prir i znanie 14 no.10:13-15 D '61.

MILIPA, N. F., FILKOV, L. V.

"Dispersion Relations for Compton-Effect on a Proton"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

L 2746-66   EWT(m)   DIA/P

ACCESSION NR: AP5024351   UR/0367/65/002/002/0352/0360

AUTHOR: Fil'kov, L. V.

TITLE: The part played by non-iterated integrals in the Mandelstram representation for γ-quanta-proton Compton scattering

SOURCE: Yadernaya fizika, v. 2, no. 2, 1965, 352-360

TOPIC TAGS: proton scattering, Compton effect, gamma scattering, dispersion equation

ABSTRACT: Double dispersion relations are used as a basis for deriving univariate dispersion relations with respect to s and u with a single subtraction for the invariant amplitudes $f'_i(s, t)$. Consideration is given to the fact that non-iterated integrals appear in double dispersion relations without subtraction as a consequence of the spin dependence of the process which may result in zeros in the spectral functions of the invariant amplitudes. Dispersion relations with respect to t are used together with the lower energy limit for determining the subtraction function. In analyzing the resultant dispersion relations, it is assumed that all higher waves in the photoproduction amplitude are determined by the particle delay term. This

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L 2746-36
ACCESSION NR: AP5024351   7

means that the asymptotic behavior of the function $T_i(s, t) - T_i(s, 0)$ as $s \to \infty$ is
determined by a quasi-localizable term equal to the sum of the poles in channel III
plus the integrals of functions which can be expressed by using the condition of
unitarity in channel III alone. A numerical analysis is given. "In conclusion,
the author thanks M. A. Markov, A. M. Baldin, V. Ya. Faynberg and V. A. Tsarev
for useful consultation on the proposed material, as well as I. Ye. Yegorova and
V. P. Fomina for assistance with the numerical calculation." Orig. art. has: 4
figures, 23 formulas.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics
Institute, Academy of Sciences, SSSR)

SUBMITTED: 27Jan65   ENCL: 00   SUB CODE: NP, MA

NO REF SOV: 002   OTHER: 006

Card 2/2

FIL KOV, Nikolay Iosifovich

KRAVETS, Zyama Isaakovich, inzh.; TROFIMOV, Sergey L'vovich, inzh.;
    FIL'KOV, Nikolay Iosifovich, inzh.; KHUTORYANSKIY, N.M., red.;
    BOBROVA, Ye.N., tekhn.red.

[Repair of air compressors of locomotives] Remont vozduhoduvok
teplovozov. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 50 p.
                                            (MIRA 10:12)
        (Air compressors--Maintenance and repair)

FIL'KOV, N.I., inzhener; DENIS'YEV, V.A., inzhener.

Machine for washing parts. Elek. i tepl. tiaga no.4:43 Ap '57.
(Railroads—Maintenance and repair) (MLRA 10:6)

KAZARINOV, Valentin Makarovich, doktor tekhn.nauk; KATANOV, Mikhail
        Ivanovich, inzh.; MEDVEDEV, Valer'yan Vasil'yevich, inzh.; MEDLIN,
        Rogvalod Yakovlevich, inzh.; TROFIMOV, Sergey L'vovich, inzh.;
        FIL'KOV, Nikolay Iosifovich, inzh.; SAZONOV, A.G., inzh., red.;
        KHITROV, P.A., tekhn.red.

        [Railroad rolling stock] Podvizhnoi sostav zheleznykh dorog.
        Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshche-
        niia, 1960.   367 p.   (MIRA 13:12)
                (Railroads--Rolling stock)

FIL'KOV, Nikolay Iosifovich; ; SHABLIY, Vladimir Maksimovich; MAYZEL',
     Mark Moiseyevich; SOBAKIN, V.V., inzh., red.; VOROB'YEVA, L.V.,
     tekhn. red.

     [Repair of the trucks of the TE3 diesel locomotive]Remont te-
     lezhek teplovoza TE3. Moskva, Transzheldorizdat, 1962. 57 p.
                                                    (MIRA 15:12)
        (Diesel locomotives—Maintenance and repair)

FIL'KOV, N.I.; MAYZEL', M.M.; POLUKHIN, N.P.; ZABRODIN, B.V.;
      KISELEVA, N.P., red.

[Maintenance and repair of the VME1 diesel locomotive]
Remont teplovoza VME1. Moskva, Izd-vo "Transport,
1964. 136 p.   (MIRA 17:8)

BOYCHENKOVA, N.G., dotsent; FILKOV, N.S., dotsent.

Effect of a brief rise in body temperature on the evacuatory
function of the abomasum. Veterinariia 30 no.7:40-41 Jy '53.
                                          (MLRA 6:7)

1. Dagestanskiy sel'skokhozyaystvennyy institut.

L 31305-66   EWT(1)/T   JK

ACC NR: AP6022587   (A,N)   SOURCE CODE: UR/0346/66/000/001/0060/0061

AUTHOR: Mos'yakov, L. P.; Filkov, P. N.

ORG: none

TITLE: Treating animals infected with foot-and-mouth disease

SOURCE: Veterinariya, no. 1, 1966, 60-61

TOPIC TAGS: foot and mouth disease, animal disease therapeutics, commercial animal, virus, virology, serum

ABSTRACT: The authors report on measures they took on a number of farms against Type Ai of the foot-and-mouth disease virus. Comparing the course of the illness with types they had previously encountered (Types A, O, and C) they consider this variant to be more pathogenic, particularly for calves up to one month in age, whose symptoms were more severe than those of older cattle. The treatment they found effective in 3 days for the youngest calves was 10 ml of serum of foaling mares, 500,000 units of Bicillin, and up to one million units of Mycerin. Grown cattle were given larger doses of the same preparations. This treatment saved all cattle, whereas convalescent serum resulted in a great loss of very young cattle. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1   cc   UDC: 619:616.988.085:636

MAKAROV, A.F.; OBOROTOV, I.Ye.; KALYADIN, I.I.; FELENKO, L.I.; PEREPELITSA,
    V.R.; NECHAYEV, B.N.; DAVYDOV, A.M.; IVANOV, N.G.; CHUVAKOV, P.F.;
    FIL'KOV, P.V.; LAR'KIN, G.D.; SVYATKIN, V.V.; SHARIFULLIN, M.

Railroad workers address metallurgists. Put' i put.khoz. 4
no.8:14 Ag '60.   (MIRA 13:8)

1. Kovylkinskaya distantsiya puti i putevaya mashinnava stantsiya
No.66, stantsiya Kovylkino, Kuybyshevskoy dorogi. 2. Nachal'nik
Kovylkinskoy distantsii puti (for Makarov). 3. Sekretari
partbyuro, stantsiya Kovylkino, Kuybyshevskoy dorogi (for Oborotov,
Nechayev). 4. Predsedatel' mestkoma, stantsiya Kovylkino,
Kuybyshevskoy dorogi (for Kalyadin). 5. Sekretari Vsesoyuznogo
Leninskogo kommunisticheskogo soyuza molodezhi, stantsiya
Kovylkino, Kuybyshevskoy dorogi (for Felenko, Ivanov). 6. Nachal'-
nik putevoy mashinnoy stantsii No.66, stantsiya Kovylkino,
kuybyshevskoy dorogi (for Perepelitsa). 7. Chlen mestkoma, stantsiya
Kovylkino, Kuybyshevskoy dorogy (for Davydov). 8. Rukovoditeli
brigad i udarniki kommunisticheskogo truda distantsii i putevoy
mashinnoy stantsii No.66, stantsiy Kovylkino, Kuybyshevskoy dorogi
(for Chuvakov, Fil'kov, Lar'kin, Svyatkin, Sharifullin).
                        (Railroads--Rails)

FILKOV, T.

PETKOV, N.

Bulgaria

No degree listed

Member of the Department of Skin and Venereal Diseases
of the Higher Medical Institute (Vissh Meditsinski
Institut), Sofia; Department Head: Prof L. POPOV.

Sofia, Dermatologiya i Venerologiya, supplement of
Suvremenna Meditsina, No 1, 1962, pp 28-31.

"Griseofulvin in the Treatment of Mycoses"

Co-author:

FILKOV, T., Department of Skin and Venereal Diseases
of the Higher Medical Institute, Sofia.

FIL'KOV, V.

"Elimination of Background Noise from the SVD-9 Receiver," Radio, 29, No.3, 1952

L 38183-66

ACC NR: AP6012317   (N)   SOURCE CODE: UR/0310/65/000/011/0037/0038

AUTHOR: Bocharov, V. (Engineer); Fil'kov, V. (Engineer)

12
B

ORG: UKiM

TITLE: Initial experience in the operation of the "Trudkommuna" lock

SOURCE: Rechnoy transport, no. 11, 1965, 37-38

TOPIC TAGS: waterway engineering, inland waterway transportation

ABSTRACT: The construction and operation of a new low pressure lock (constructed in the Moscow River water transport system and put into full operation in 1964) are described. The walls and floor of the chamber are made of aggregate prefabricated reinforced concrete elements. The gates are the first in the Soviet Union to feature counterweighted segments with full-turn operation. The lock is automatic and has an outflow control panel. The operation time of the lock proved to be 18 min per vessel, as opposed to 33 min in the old lock. A number of design and construction defects are noted. Orig. art. has: 3 figures.

SUB CODE: 13/   SUBM DATE: none

UDC: 626.4.004

Card 1/1   vmb

BOCHAROV, V., inzh.; FIL'KOV, V., inzh.

First work results of the "Trudkommuna" lock. Rech. transp. 24
no.11:37-38 '65.   (MIRA 19:1)

1. Upravleniye kanala imeni Moskvy Ministerstva rechnogo flota
RSFSR.

SOV/14-57-12-25482

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 12,
p 17 (USSR)

AUTHOR: Fil'kov, V. A.

TITLE: [Erosion and Surface Relief in the Rostov Oblast]
(Eroziya i rel'yef Rostovskoy oblasti)

PERIODICAL: Uch. zap. Rostovsk.-n.-D. un-ta, 1956, Vol 26, pp 59-68

ABSTRACT: To facilitate erosion study, the author has prepared
maps drawn to a definite scale which show the elevation
at the base level of erosion, the density of ravines
and gullies, and the surface relief of Rostov Oblast.
These maps were compiled according to S. S. Sobolev's
method. The author comes to the conclusion that the
greatest depths of erosion do not always occur in the
regions of the most intensive erosional activity. The
depth and the density of incised channels must be
considered jointly. The author proposes to correct

Card 1/3

SOV/14-57-12-25482

Erosion and Surface Relief (Cont.)

the formula for computing average slopes, which Sobolev derived from his study of the ground surface in the European USSR. Sobolev's formula gave a figure which S. I. Sil'vestrov called an erosional and geomorphological coefficient (Postroyeniye i razmeshcheniye sistemy sevooborotov i zashchitnykh lesnykh nasazhdeniy v erozionnykh rayonakh tsentral'noy lesostepnoy zony. Nauchnyy otchet VNIALMI, 1949) (Planning and Introduction of Crop Rotation in Protective Forest Plantings on Eroded Sections in the Central Forest-Steppe Zone. Report of the All-Union Scientific Research Institute of Agricultural and Forest Melioration, 1949). This coefficient indicates the possibility of erosion developing in a given area and is dependent on the geomorphological peculiarities of the area. The magnitude of this coefficient was used in determining potential erosional development in Rostov Oblast. The following regions of potential erosional development have been distinguished: 1) strong, locally intensive erosion--the Donets Ridge and the right bank section of the Middle Don River; 2) strong erosion--interstream zone
Card 2/3

SOV/14-57-12-25482

Erosion and Surface Relief (Cont.)

between the Don and Donets Rivers; 3) moderate erosion--the Azov
sloping plain and the southern slopes of the Sal-Manych divide;
4) slight erosion--the left bank of the Chir River, the Don-Bystraya
divide, the Don-Sal divide, and the northern slope of the Sal-Manych
divide; 5) uneroded or slightly eroded areas--the valleys of the Don
River and of its large tributaries, and the northern part of the
Azov-Black Sea plain to the south of the Don and the Manych Rivers.
The first three regions show the greatest tendency to form gullies
and to develop sheet erosion. The author divides Rostov Oblast into
a northern part (the northern section of the lower Don River) with
well developed slopes, and a southern part (the southern section of
the lower Don River) which is almost flat. After computing mean
slope as the arithmetic mean for previously calculated areas of
varying steepness within this territory, the author can distinguish
geomorphological regions with a definite slope steepness. Such a
calculation enables him to isolate slopes subject to intensive erosion
to which definite anti-erosion techniques should be applied.
Card 3/3   T. D. Ryskina

ZAIMOV, K.K.; FIL'KOV, V.A.

Characteristics of organic matter in Chernozems of Moldavia.
Pochvovedenie no.10:68-72 '60.   (MIRA 13:10)

1. Kishinevskiy gosudarstvennyy universitet.
                    (Moldavia--Chernozem soils)

ZAIMOV, K.K.; FIL'KOV, V.A.

Changes in the trend of humus formation in the forest soils of
Moldavia after plowing. Pochvovdenie no.4:87-92 Ap '63.
(MIRA 16:5)

1. Kishinevskiy gosudarstvennyy universitet.
(Moldavia—Forest soils) (Moldavia—Humus)

L 44132-66   NONE

ACC NR: AT6019746   SOURCE CODE: UR/3192/65/000/011/0173/0180

53

Br/

AUTHOR: Fil'kov, V. G.

ORG: none

TITLE: Electronic model of a nerve cell axon

SOURCE: Akademiya nauk Latviyskoy SSR. Institut elektroniki i vychislitel'noy tekhniki. Avtomatika i vychislitel'naya tekhnika, no. 11, 1965, 173-180

TOPIC TAGS: bionics, cell physiology, nerve fiber, tunnel diode

ABSTRACT: A tunnel diode model of a nerve cell axon with lumped parameters is described. An equivalent circuit of myelitic axon is proposed in Figure 1. Membrane
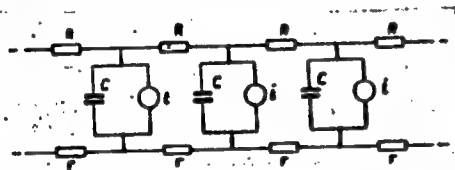
Fig. 1.

zones in the Ranvier nodes are connected by the intercellular fluid resistance R and by the axoplasm resistance r inside the membrane. Near these nodes the

UDC: 62-506.22

Card 1/2

L 44132-66

ACC NR: AT6019746

axon membrane exhibits electric activity due to the ionic current generator i. The capacitance of the membrane in these regions is on the order of 1 microfarad/cm^2 and must be taken into consideration. Myelitic axon then may be examined as a chain of relaxators consisting of a power source energy, storage element and a nonlinear element with a negative resistance segment. The model is made up of tunnel diode oscillators with an inductive storage element. The cells are connected by capacitors. [14]

Orig. art. has: 14 formulas, 10 figures.

SUB CODE: 06,09/   SUBM DATE: Nov64/   ORIG REF: 003/   OTH REF: 001

LS
Card 2/2

FILKOV, Ye.V., Cand Tech Sci — (diss) "Study of distortions
in the reproduction of color television images in a tube
with *structed* screen." Len, 1959, 18 pp (Min of
Communications USSR. Len Electrical Engineering Inst of
Communications im Proffessor Bonch-Bruyevich) 200 copies
(KL, 33-59, 119)

- 39 -

FILKOV, Ye. V.,

"Investigation of Distortion in the Reproduction of Color Television Images on a Tube with a Line Screen." Dissertation for the Degree of Candidate of Sciences (Leningrad Electrotechnic Institute of Communication im. M. A. Bonch-Bruyevich. Defense held on 25 June 1959.

An analysis and classification were made of the possible and actual distortions in color transmission, which arise when a receiving tube with line screen is used. Ways and methods of estimating different methods of correction of distortion of color transmission are indicated.

Izv Vysshikh ucheb. zaved. MViSSO SSSR po razdelu Radiotekhnika, vol. 6, No. 1, 1963, p. 98-102 (original checked--Cand. of Sciences as in original.)

FIL'KOV, Yu.S.

Developing the interest in learning in young naturalists during work on the school plot.   Biol. v shkole   no.1:68-71   Ja-F '59.
(MIRA 12:2)

1. Pskovskiy pedagogicheskiy institut.
(Agriculture--Study and teaching)

FILKOVA, V.

Our experiences with treatment of periodontosis with oxidized
serum. Cesk. stomat. 65 no.4:256-263 Jl '65.

1. I. stomatologicka klinika lekarske fakulty University J.E.
Purkyne v Brne (prednosta prof. dr. M. Filipinsky).

FIL'KOVA, Ye.M.,nauchnyy sotrudnik

Radiation therapy of erythremia. Vest.rentg. i rad. 33 no.
1:64-68 Ja-F '58.   (MIRA 11:4)

1. Iz rentgenoterapevticheskogo otdela (zav.-prof. L.D. Podlyashuk)
Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii
i radiologii (dir.-dots. I.G. Lagunova).
           (POLYCYTHEMIA VERA, ther.
              radiother., comparison with radiophosphorus (Rus)
           (RADIOTHERAPY, in various dis.
              polycythemia vera, comparison with radiotherapy (Rus)

SHEKHONIN, V.P., doktor med. nauk; FIL'KOVA, Ye.M.; VAGANOVA, T.A.

Use of vitamin P in radiation sickness. Trudy TSentr. nauch.-
issl. inst. rentg. i rad. 10:409-414 '59.   (MIRA 12:9)
(RADIATION SICKNESS) (RUTIN--THERAPEUTIC USE)

PIL'KOVA, Ye.M. (Moskva, Zh-240, Verkhnyaya Radishchevskaya, d.4, kv. 6)

Involvement of the stomach in chronic lymphatic leukemia. Vest.
rent. i rad. 34 no.1:77-79 Ja-F '59.   (MIRA 12:3)

1. Iz rentgenoterapevticheskogo otdela (rukovoditel' - prof. L. D.
Podlyashchuk [deceased], Gosudarstvennogo nauchno-issledovatel'skogo
rentgeno-radiologicheskogo instituta (dir. - dots. I.G. Lagunova)
Ministerstva zdravookhraneniya RSFSR.
          (LEUKEMIA, LYMPHATIC, pathol.
                stomach (Rus))
          (STOMACH, pathol.
                in lymphatic leukemia (Rus))

FIL'KOVA, Ye.M.

Use of an X-ray centering device for static radiation therapy. Vest.
rent. i/ rad. 36 no. 1:61 Ja-F '61.   (MIRA 14:4)
        (X RAYS--THERAPEUTIC USE)

FIL'KOVA, Ye. M.

Cand Med Sci - (diss) "Radiation therapy of erytremia." Moscow,
1961. 15 pp; (Ministry of Public Health USSR, Central Inst for
Advanced Training of Physicians); 250 copies; free; (KL, 6-61
sup, 241)

PERESLEGIN, I.A.; PERESLENIÏ, N.A.; FIL'KOVA, Ye.M.

1. Iz rentgenoterapevticheskogo otdela Gosudarstvennogo nauchno-
issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva
zdravookhraneniya RSFSR.
(RETICULO-ENDOTHELIAL SYSTEM--TUMORS) (RADIOTHERAPY)

PERESLEGIN, I.A.; PERESLENI, N.A.; FIL'KOVA, Ye.M.

Rotation roentgenography of pulmonary cancer. Med.rad. no.11:
3-6 '61.   (MIRA 14:11)

1. Iz rentgenoterapevticheskogo otdela Gosudarstvennogo nauchno-
issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva
zdravookhraneniya RSFSR.
          (LUNGS—CANCER)   (LUNGS—RADIOGRAPHY)

SYROMYATNIKOVA, Ye.N.; FIL'KOVA, Ye.M.

Gas exchange during radiotherapy for pulmonary cancer. Med.rad.
6 no.8:14-18 Ag '61.   (MIRA 14:8)

1.Iz biokhimicheskoy laboratorii rentgenoterapevticheskogo otdela
Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologiche-
skogo instituta Ministerstva zdravookhraneniya RSFSR.
        (LUNGS—CANCER) (RESPIRATION) (RADIOTHERAPY)

KUBAREVA, M.M.; FIL'KOVA, Ye.M.

Blood proteins and riboflavin metabolism in patients with malignant
neoplasms during radiotherapy. Med. rad. 8 no.6:15-19 Je '63.
(MIRA 17:4)

1. Iz biokhimicheskoy laboratorii (rukoveditel' - prof. I.B. Fridlyand)
i rentgenoterapevticheskogo otdela (rukoveditel' I.A. Pereslegin)
Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta
Ministerstva zdravookhraneniya RSFSR.

LUK'YANCHENKO, B.Ya.; FIL'KOVA, Ye.M.

Lymphography as a method for visual observation of the effectiveness
of radiotherapy in malignant diseases of the lymphatic system. Med.
rad. 9 no.3:17-19 Mr '64.   (MIRA 17:12)

1. Rentgenodiagnosticheskiy (zav. — doktor med. nauk L.S.Rozenshtraukh)
i rentgenoterapevticheskiy otdely (zav. — dotsent I.A.Pereslegin)
Nauchno issledovatel'skogo rentgeno-radiologicheskogo instituta
(direktor prof. I.G.lagunova) Ministerstva zdravookhraneniya RSFSR.

LUK'YANCHENKO, B.Ya. (Moskva); FIL'KOVA, Ye.M. (Moskva)

Use of lymphographic data in the course of treatment of
patients with malignant diseases of the lymphatic system.
Trudy TSentr. nauch.-issl. inst. rentg. i rad. 11 no.1:
103-108 '64.   (MIRA 18:11)

FIL'KOVA, Ye.M. (Moskva); KHMELEVSKAYA, Z.I. (Moskva)

Radiotherapy of the pulmonary form of lymphogranulomatosis.
Trudy TSentr. nauch.-issl; inst. rentg. i rad. 11 no.1:201-
207 '64.   (MIRA 18:11)

FIL'KOVSKAYA, N. (Chelyabinsk)

Here are the results. Okhr.truda i sots.strakh. no.9:53
S '59.   (MIRA 13:1)

1. Zaveduyushchaya otdelom sotsial'nogo strakhovaniya obkoma
profsoyuza rabochikh metallurgicheskoy promyshlennosti.
    (Chelyabinsk--Medicine, Industrial)

FIL'KOVSKIY, L., inzhener; ANTONOV, V., inzhener.

Large wall blocks made of block rubble. Stroitel' no.5:6-7 My '57.
(Azerbaijan--Building blocks)   (MIRA 10:6)

CZECHOSLOVAKIA/Human and Animal Physiology - Blood.   T-4

Abs Jour   :   Ref Zhur - Biol., No 7, 1958, 31594

Author   :   Bilek, O., Filkuka, J., Vlasin, Z.
Inst   :   -
Title   :   On the Problem of the Nerve Regulation of Leukocytosis.

Orig Pub   :   Scripta med., 1955, 28, No 4-5, 193-199

Abstract   :   In rabbits, the exposure of the ear vein (according to
                Nikolayev) with the preservation of the innervation of the
                ear caused "tension" with leukocytosis and hyperglycemia.
                The introduction into the exposed vein of 4% formalin after
                the elimination of these phenomena caused leukocytosis anew
                and an increase of the content of sugar in the blood.
                Leukocytosis is considered as a manifestation of nerve re-
                gulation accomplished by the transmission of stimulation
                of the interoceptors of the walls of the vessel in the
                peripheral nerves. Hyperglycemia is connected with the
                change of the tonus of the autonomic nerve system,

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- 32 -

Card 2/2

FILKUKA, J.; AUBRECHTOVA, V.; HORNOVA, J.

Microspectrophotometric determination of the amount of DNA in
cells of the epithelial lining of maxillary cysts and in cells
of a spinocellular carcinoma caused by their malignant trans-
formation. Cesk. stomat. 65 no.5:311-319 S '65.

1. I. patologickoanatomicky ustav (prednosta prof. dr. Jar.
Svejda, DrSc.) a II. stomatologicka klinika (prednosta prof.
dr. Jos. Svejda, DrSc.) lekareke fakulty University J.E.
Purkyne v Brne.

FILKUKA, J.

7425. Changes in the level of excitability of the nervous system and the response of the rat's thymus and hibernating gland to stress. Z. Vlašin and J. Filkuka *Arch. exp. Path. Pharmak.*, 1956, 227, 414—428 (Dept. of Pathol. Masaryk Univ., Brno, Czechoslovakia).— Injections of formalin provided the stress; phenobarbitone and strychnine were used to depress or excite the c.n.s. Response to stress was judged by the histological appearance of the tissues under review. On the whole, the state of excitability of the c.n.s. had little or no effect on the histological changes produced in these tissues by this form of stress. (German)   P. MESTITZ.

CZECHOSLOVAKIA   UDC   616.24-003.65(:546.284):616.428-076

SKLENSKY, Bohuslav; FILKUKA, Jaroslav; ZAVREL, Ivo; Clinic of
Occupational Diseases (Klinika Nemoci z Povolani) Head (Prednosta)
Prof Dr J. VYSKOCIL; 1st Institute for Pathological Anatomy (I. Ustav
Patologicke Anatomie) Head (Prednosta) Prof Dr J. SVEJDA; 1st Sur-
gical Clinic (I. Chirurgicka Klinika) Head (Prednosta) Docent Dr J.
UHLIR, Medical Faculty, J. Ev. Purkyne University (Lek. Fak. UJEvP)
Brno.

"Bippsy of Scalene Nodules in Silicosis."

Abstract /Authors' English summary modified_7: Extirpation and
histological examination of deep scalene nodules from the right
neck side of 27 patients was carried out. Foundry workers, miners,
tunnellers, and stone cutters showed symptoms of complicated sil-
icosis most frequently. In 8 of the investigated workers marked
silicotic nodules were found by histological examination; in 15
deposits of anthracotic pigment , and in all cases acute lymphaden-
its was   found. Tuberculous changes were not found at all. 6
Figures, 10 Western, 2 Czech, 1 Russian, 1 East German, 1 Polish,
1 Hungarian reference. (Manuscript received 27 Oct 65).
1/1

CZECHOSLOVAKIA / Chemical Technology. Chemical Prod-   H-5
                    ucts and Their Application. Water
                    Treatment. Sewage.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1737.

Author : Fill, J.
Inst   : Not given.
Title   : Purification of Sewage Waters in Weakly Populated
          Localities.

Orig Pub: Voda, 1957, 36, No 11, 299-300.

Abstract: No abstract.

Card 1/1

15

FILL, Josef, inz.

Building of septic chambers of sewage treatment plants. Vodni
hosp 13 no.3:115-116 '63.

1. Ingstav, Brno.

FILLENZ, Jeno

Remark on the article entitled "Casting Technique of Fused Materials."
Musz elet 16 no.11:6 My '61.   (EEAI 10:9)

(Founding)

L 39388-65   EWT(d)   IJP(c)

ACCESSION NR: AP5005882   S/0020/65/160/003/0555/0557

AUTHOR: Filler, F. M.

TITLE: On the numerical solution of Fredholm integral equations of the second kind

SOURCE: AN SSSR. Doklady, v. 160, no. 3, 1965, 555-557

TOPIC TAGS: Fredholm integral equation, second kind Fredholm equation, Fredholm equation numerical solution, economical solution method

ABSTRACT: The numerical solution of Fredholm integral equations of the second kind is considered. It is indicated that the solution of these equations is usually reduced to the solution of the following system of linear algebraic equations:

$$f(x_i) + \sum_{j=1}^{n} A_j K(x_i, y_j) f(y_j) = \varphi(x_i), \quad i = 1, 2, \ldots, n \qquad (1)$$

in which the sum stands for the integral $\int^b K(x, y) f(y) dy$ of the integral equation and means a certain quadrature formula with y_j integration points which coincide with the points $x_1, x_2, \ldots x_n$ at which
Card 1/3

L 39388-65

ACCESSION NR: AP5005882

the function $f(x)$ is sought. If the number of x_i points is n and the number of integration points is k, then it is necessary to solve a system of $N = \max(n, k)$ linear algebraic equations whose solution requires CN^3 operations and N^2 cells of computer memory. As compared with known methods, the proposed method economizes computer time and memory. Using this method, the number n of x_i points, as well as the corresponding number of linear equations, does not depend on the number of integration points y_{ij} for various x_i. Using a certain interpolation formula, function $f(y_{ij})$ is expressed in terms of x_i and substituted into equation (1). From the derived system of equations, $f(x_1)$, $f(x_2)$,...$f(x_n)$ can be calculated. An algorithm is proposed for determining x_1, x_2,..., x_n and the corresponding quadrature formulas which are necessary to achieve the required accuracy and a procedure is presented for verifying that the number of selected points x_1, x_2,...x_n is sufficient to describe the function $f(x)$. Solution of the Fredholm integral equation by the proposed method requires cn^3 operations and n^2 cells of computer memory. Expecially, when $f(x)$ is more smooth than $K(x, y)$, it economizes the time required for computations and a computer memory. It is noted that at the Institute of Theoretical and Experimental Physics, the described method is realized

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L 39388-65

ACCESSION NR: AP5005882   O

in the form of Routine B-19 which is written using the standard
routines B-61. Orig. art. has: 13 formulas.   [LK]

ASSOCIATION: none

SUBMITTED: 21Jan64   ENCL: 00   SUB CODE: MA

NO REF SOV: 000   OTHER: 000   ATD PRESS: 3195

Card 3/3

FILLER, F.M

SUBJECT   USSR / PHYSICS   CARD 1 / 2   PA - 1844
AUTHOR   VERESCAGIN.L.F., SEMERCAN,A.A., FIRSOV,A.I., GALAKTIONOV,V.A.,
             FILLER,F.M.
TITLE   Some Investigations on the Hydrodynamics of a Jet of Liquid
             ejected from a Nozzle under the Pressure of up to 1500 atm.
PERIODICAL   Žurn.techn.fis, 26, fasc.11, 2570-2577 (1956)
             Issued: 12 / 1956

By the work carried out in the laboratory for the physics of extremely high
pressure of the USSR Academy of Science concerning the construction of com-
pressors for extremely high pressures it was possible to develop a continu-
ously operating machine which is able to eject water through a nozzle of from
0,2 to 0,8 mm diameter at pressures (prevailing before the nozzle) of up to
1500 atm. As such a pressure drop before and behind the nozzle requires great
efficiency of the hydraulic compressor, it was necessary to build a machine
that performed at least 1000 revolutions per minute and that was able at pres-
sures of up to 2000 atm to produce one ton of water per hour.
The authors carried out their tests at pressures below 1500 atm in order to
diminish the part played by the boundary layer introducing the jet of liquid.
They used nozzles of at least 0,45 mm diameter; shape and surface of the noz-
zle exercise considerable influence on the disintegration of the jet of liquid.
The most favorable shape of the nozzle is shown in form of a drawing. On this
occasion it was not possible to use any of the existing methods for the direct
measuring of the jet velocity, and it was necessary to use the BERNOULLI

equation for this purpose. A diagram illustrates the dependence of jet veloc-
ity on the pressure prevailing in the receiver before the nozzle. The authors
computed this dependence by using BRIDGMAN'S data for the compressibility of
water. Up to pressures of from 3000 to 4000 atm the compressibility of water
does not play an important part and the approximated formula $v = 14 \sqrt{p}$ may
be used (p in kg/cm^2, v in m/sec). At such velocities REYNOLD'S numbers be-
come very high (order of magnitude 10^5). They are mentioned in a table for a
nozzle of 0,6 mm. The temperature of the jet increases with an increase of
pressure and therefore also with an increase of velocity. Heating by friction
and adiabatic cooling act in opposition to each other. Also a negative
JOULE-THOMSON effect becomes noticeable. According to the opinion of the
authors the experimentally attainable velocity of a jet of water ejected from
a nozzle is limited only by the JOULE-THOMSON effect, for the temperature of
the jet increases to such an extent at a certain pressure that the water
evaporates. The authors found such an evaporation to take place on the
occasion of an experiment carried out at 5000 atm, which fact may also be
confirmed by rough calculation. The jet of water was investigated by means of
a cinematographic camera producing 5000 pictures per sec, so that the general
properties of the jet could be examined.

INSTITUTION:

FILLER, F.M

8513+73 (Russian.) Studies of a Jet of Water Issuing From a Nozzle at a Pressure of 2,000 Atmospheres. Sebatorve i do 2000 atmosfer. L. F. Vereschagin
F. M. Filler. Izvestiia Akademii
nauk

Studies made with
ture measurements. Heating of the water
effects at a velocity of 600 m/sec. Sug
an upper limit to the velocity which
velocity decreases beyond
measure of the

AUTHORS: Vereshchagin, L. F., Semerchan, A. A., Fille, F. M.,   57-11-26/33
            Galaktionov, V. A.,

TITLE: The Role of the Receiver at the Flow of a Water Flux at Superso-
            nic Velocity (Znacheniye resivera pri istechenii vodyanoy strui
            sverkhzvukovoy skorosti)

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 11, pp. 2640-2646, (USSR)

ABSTRACT: Here a theoretical computation of the dependence of the pressure-
            pulsation-smoothing degree in the receiver on the capacity of at
            pressure production in this receiver by means of a hydraulic ultra-
            high-pressure compressor was carried out. The influence of the re-
            ceiver-capacity (contents) on the pressure-pulsation-smoothing de-
            gree in the receiver is investigated by experiment. The results of
            the computation were compared with those of the experiment with re-
            gard to the pressure-pulsation-smoothing degree of the water in
            the receiver and it was ascertained that the theoretical computa-
            tion in spite of a number of simplifying assumptions shows a satis-
            fyingconformity with the data of the experiments. On account of the
            results of the experiments the water jet, which flows out of a 5-6
            liter receiver at supersonic velocity, may be looked upon as well
            smoothed with regard to the impulse-pressures and consequently also
            with regard to the impulse-velocities.There are 5 figures, 2 tab-
            les and 3 Slavic references.

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The Role of the Receiver at the Flow of a Water Flux at Superso-   57-11-26/33
nic Velocity.

ASSOCIATION: Laboratory for Physics of Ultra-High Pressures AN USSR (Laboratori-
ya fiziki sverkhvysokikh davleniy AN SSSR)

SUBMITTED: December 30, 1956

AVAILABLE: Library of Congress

Card 2/2

FILLER, F. M.

57-2-32/32

AUTHORS: Vereshchagin, L. F. , Semerchan, A. A. , Filler, F. M.

TITLE: On the **Velocity Break in a Water**
              Jet (K vaprosu o razryve skorosti v vodyanoy struye)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 2, pp.433-435
              (USSR)

ABSTRACT: Reference is made to the tests already described (references
              1 and 2) on the investigation of the water-jets with super-
              sonic speed. The jet is produced by a water-compressor with
              an expansion chamber. The water jet flowing out of a 1 mm
              nozzle was photographed with a cinematographic equipment. The
              velocity of the photograph was 8000 pictures per second. The
              obtained photographs give the possibility to determine when
              the conditions for the outflow of the jet seem to be guaran-
              teed, the shape of the jet does not change with time and all
              pictures are stereotype. The here-observed nature of the out-
              flow in many respects recalls the cases described in reference
              1. It is shown that a disk of liquid forms at the intersec-
Card 1/2   tion of the "fast" and the "slow" jet. Two cases of discon-

On the Velocity Break in a Water Jet

tinuity were theoretically investigated: 1.) the velocity in the nozzle is a step-function of the time and 2.) the velocity in the nozzle makes an instantaneous jump with a subsequent linear fall with respect to time. In both cases a discontinuity of the free jet occurs. At the intersection of the "fast" and the "slow" jet a disk of liquid forms which rotates with a velocity that is equal to the arithmetic mean of the velocity of the liquid-particles immediately before and after the intersection. In the first case the disk is flat and moves with a velocity $u = \dfrac{u_1 + u_2}{2}$. In the second case the disk loses its flat shape and the point of intersection moves slowly . These tests made by the author essentially confirm the conclusions of theory. It is pointed out that this report made here for the time being has only a qualitative nature. There are 2 figures, and 5 references, 4 of which are Slavic.

ASSOCIATION: Ultra-High Pressure Physics Laboratory, AS USSR
(Laboratoriya Fiziki sverkhvysokikh davleniy AN SSSR)

SUBMITTED: May 3, 1957
AVAILABLE: Library of Congress
Card 2/2

1. Jets-Velocity-Water   2. Water-Velocity-Test methods
3. Water-Velocity-Test results   USCOMM-DC-54759

SOV/57-28-9-30/33

AUTHORS: Semerchan, A. A., Vereshchagin, L. F., Filler, F. M., Kuzin,
             N. N.

TITLE: Momentum Distribution in a Continuous Fluid Jet at Supersonic
             Velocity (Raspredeleniye kolichestva dvizheniya v nepreryvnoy
             zhidkostnoy struye sverkhzvukovoy skorosti)

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1958, /Vol 28, Nr 9, pp. 2062-2071

ABSTRACT: This paper covers the investigation of a continuous horizontal
             fluid jet at sub- and supersonic velocity (from 300 to
             540 m/sec). The principal procedure adopted in the experiments
             is described. In order to obtain a jet with the required para-
             meters, the Nr 1 hydraulic plant of the association mentioned
             below (Ref 7) was used. The distribution of momentum in a con-
             tinuous water jet ejected at supersonic velocities from a
             nozzle was obtained. According to the curves describing the
             momentum distribution the boundaries of a free water jet moving
             with supersonic velocity in the atmosphere were determined. The
             contour of the jet is in accordance with that observed in pho-
             tographs. It was found that an increased viscosity of the fluid
Card 1/2   results in a reduction of the conical angle of the jet. A com-

Momentum Distribution in a Continuous Fluid Jet at Supersonic Velocity

SOV/57-28-9-30/33

bination of the method of determining the momentum (which was used here), together with a satisfactory method of determining the density of the moving medium throughout the jet makes it possible to find the velocity field and the distribution of kinetic energy in supersonic fluid jets. There are 11 figures, 2 tables, and 7 references, 5 of which are Soviet.

ASSOCIATION: Laboratoriya fiziki sverkhvysokikh davleniy AN SSSR, Moskva (Laboratory of Physics of Superhigh Pressures, AS USSR, Moscow)

Card 2/2

/0.2000

AUTHORS: Semerchan, A. A., Filler, F. M., Dembo, N. S., Kuzin, N. N.

TITLE: The Application of Liquid Jets Flowing Out at Ejector
               Pressures of up to 1,000 kg/cm^2

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 2,
               pp. 61-66

TEXT: Peculiarities and rules of ejectors are investigated at a pressure of
the active liquid (p_1) between 300 and 1,000 kg/cm^2, and a pressure of the
passive liquid (p_2) between 1 and 7.6 atmospheres. A diagram of the experi-
mental plant is shown by Fig. 1. By exchanging the central ejector part,
4 discharge parts with different diameters could be investigated. The ex-
perimental results are given in Figs. 2 and 3. As can be seen, the charac-
teristic of the ejector consists of a working and a cavitation (vertical)
part. The limit of the ejection coefficient q^* is determined by the pres-
sures p_1 and p_2 as well as by the form and size of the discharge part. An

Card 1/2

80278

The Application of Liquid Jets Flowing Out at S/170/60/003/02/11/026
Ejector Pressures of up to 1,000 kg/cm^2 B006/B005

increase in p_1 leads to an approximately proportional pressure increase
behind the ejector, at the same time shifting the beginning of cavitation in
the direction of lower q-values. The change in p_2 influences only slightly ·
the working characteristic but the more so the critical ejection coefficient.
·The critical ejection coefficient is well expressed by the formula

$$q' = (m-1)\sqrt{\frac{p_2 - p_s}{p_1 - p_s}}$$ suggested by P. P. Korolev (Ref. 6). p_s = pressure of

the saturated vapors. Table 1 shows that this formula in first approximation
permits a determination of the position of the cavitation branch of the
characteristic. The formation of cavitation was observed visually. Fig. 4
shows the transparent discharge part of an ejector model under varying work-
ing conditions. There are 4 figures, 1 table, and 6 Soviet references.

ASSOCIATION: Institut fiziki vysokikh davleniy AN SSSR, g. Moskva
               (Institute of High-pressure Physics AS USSR, City of Moscow)

Card 2/2

10.4000

AUTHORS: Semerchan, A. A., Vereshchagin, L. F., Filler, F. M.,
           Kuzin, N. N.

TITLE: The Problem of the Destructive Effect of Cavitation

PERIODICAL: Inzhenerno—fizicheskiy zhurnal, 1960, Vol. 3, No. 3,
             pp. 87-90

TEXT: The formation of cavities by quickly moved liquids is investigated.
Among other things, the authors refer to the opinion expressed by
M. Kornfel'd (Ref. 3), according to which the destructive effect is caused
immediately by the water hitting the metal surface. Besides this purely
mechanical theory of the effect produced by cavitation, also the chemical
theory is mentioned. Experimental results, in which the time-dependence of
the formation of cavities on various factors was investigated, are discussed.
As may be seen from Fig. 2, the time for the formation of cavities decreases
sharply with increasing velocity. Fig. 3 graphically shows the dependence
of the time required for the formation of cavities upon the distance be-
tween the metal plate and the nozzle for three different nozzle diameters

Card 1/2

The Problem of the Destructive Effect of
Cavitation

(0.64-0.84 mm). The rate of outflow was 440 m/sec. For each of the three
curves it was found that at a certain distance the time required for the
formation of cavities is a minimum. This high intensity of cavitation is
connected with the division of the jet. The results obtained tend to con-
firm the mechanical cavitation theory. There are 3 figures, 3 tables, and
6 references: 4 Soviet and 2 English.

ASSOCIATION: Institut fiziki vysokikh davleniy AN SSSR, g. Moskva
(Institute of High-pressure Physics of the AS USSR, City
of Moscow)

Card 2/2

ADEL'SON-VEL'SKIY, G.M. (Moskva), FILLER, F.M. (Moskva)

Program for calculating network graphs. Zhur. vych. mat. i mat.
fiz. 5 no.1:144-148 Ja-F '65.
(MIRA 18:4)

FILLER, F.M.

Numerical solution of Fredholm integral equations of the second
order. Dokl. AN SSSR 160 no.3:555-557 Ja '65.   (MIRA 18:3)

1. Submitted October 21, 1964.

KOKURIN, V.; FILLER, Yu., arkhitektor

Glass, ceramics, plastics. Obshchestv.pit. no.2:53-54 F '63.
(MIRA 16:4)

1. Direktor Gosudarstvennogo instituta po proyektirovaniyu predpriyatiy
torgovli i obshchestvennogo pitaniya (for Kikurin).
(Restaurants, lunchrooms, etc.—Design and construction)

ENTZ, Bela; E. FILLINGER, Margit

Data on the light climate of Balaton. Annales biol Tihany
28:49-89 '61.

1. "Annales Instituti Biologici (Tihany) Hungaricae Academiae
Scientiarum" szerkesztoje.(for Entz).

ACC NR: AT0014855

SOURCE CODE: UR/2531/66/000/188/C059/0067

AUTHOR: Fillipov, A. Kh.

ORG: None

TITLE: Evaluation method for corona discharge currents from natural points

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 188, 1966. Atmosfernoye elekrichestvo (Atmospheric electricity), 59-67

TOPIC TAGS: atmospheric electricity, thunderstorm, lightning, corona discharge, corona discharge current, thunderstorm measurement

ABSTRACT: This paper presents a theory and a method of total corona discharge estimation, for a discharge from natural sharp points on the Earth's surface. This work was motivated by the inadequacy of current approaches to this topic. The method is based upon regarding the total electric field at the earth's surface to be the sum of 1) the field connected with the Earth's surface, charge and 2) one connected with the volume or space charge of the atmosphere. The density of corona current (corona current per cm^2), i, is shown to be related to the charge q (both referred to a vertical cylinder of air 1 cm^2 cross section) as: $i = dq/dt = (1/4\pi)(dE/dt)$ (1) E - field strength. It is proposed to determine dE/dt from the time variation of E immediately after a lightning discharge, more specifically, as the shorter of the two time constants involved in the expression for E:

Card 1/2

GUBAREV, A.V., kand.tekhn.nauk; FILLIPPOV, G.A., inzh.; PAND'YA, A.D., inzh.

Bladeless gate apparatus for centripetal turbines (from "Gas and
Oil Power," no.1 1961). Energomashinostroenie 9 no.2:38-39 F
'63.

(Gas turbines)   (MIRA 16:3)

ACC NR: AT6014855

$$B = B_1 \exp(-t/\tau_i) + E_2 \exp(-t/\tau_L) \qquad (2)$$

which was found well approximated by post-discharge relaxations. $E = E(t)$ is determined experimentally and stored, for a number of equidistant time values. The most probable magnitudes of E_1, E_2, τ_i, and τ_L are then calculated by least squares optimization method. Analysis of the electric field component of the volume charge was made on the basis of data from 257 post-discharge electric field relaxations obtained for 17 thunderstorms during 1960-1962. Calculations were performed on the URAL-2 computer. Programming was in two stages, searching for two-exponents coefficients first and for one exponent next, conditional upon absence of one of the two. Corona discharge currents were determined and compared with those from an artificial point. The effective area, i.e. the area having the same corona current as one artificial point can be estimated by equating the developed summary corona current expression to the expression for the artificial sharp point corona current. Observations have shown this area, for Irkutsk, to be 360 m^2. Knowledge of the total corona discharge current under a cloud permits determination of the total current under a cloud if the relation between corona current and field strength and the electrical structure of the cloud are known. Orig. art has 2 figures, 5 formulas and 3 tables.

SUB CODE: 04/   SUBM DATE: None/   ORIG REF: 009/   OTH REF: 005

Card 2/2

FILLIPPOV, L.P.; PIGAL'SKAYA, L.A.

Measuring the thermal diffusivity of metals at high temperatures.
Part 1. Theory of the method of variable heating in a high-frequency
furnace. Teplofiz. vys. temp. 2 no.3:384-391 My-Je '64.

(MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ACCESSION NR: AP4034655

S/0096/64/000/005/0054/0057

AUTHORS: Fillipov, G. A. (Candidate of technical sciences); Wang, Chung-ch'i (Engineer)

TITLE: The effect of twist in flow on the characteristics of nozzle grids

SOURCE: Teploenergetika, no. 5, 1964, 54-57

TOPIC TAGS: annular nozzle grid, static pressure, turbine blade, reaction pressure, centrifugal force, peripheral loss, end loss

ABSTRACT: The available experimental results of studies on annular nozzle grids with twisted flow at the inlet were analysed and a method is proposed for calculating the static pressure of the blades on the grids. It was found that the peripheral losses were less for grids with radially installed blades than for blades inclined at an angle of 2 to 10 degrees. For grids with s'raight blades installed radially on the periphery, the losses due to splashing were considerable, but these were reduced and moved towards the hoop by the use of curvilinear blades. The force on the blade due to the flow is given by the expression

$$F_r = \frac{\lg \gamma}{B}\left(c_{1u} - c_{wo s}\frac{r - r_n}{B - r_k}\right),$$ where γ is the angle of inclination of the blade, B the

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ACCESSION NR: AP4034655

width of the profile, C_{lu} the surrounding component of the speed in the gap, C_{u_oB} the surrounding component of the speed before the nozzle, and r_k, r_B the root and peripheral radii. The distribution of the reaction on the blade is given by the expression $\rho = 1 - (1 - \rho_n)\left(\frac{c_{ii}}{c_{iis}}\right)^{s}$, where ρ's are the reactions, k refers to the root, t to the periphery, and o's are the component speeds. Orig. art. has: 5 formulas, 5 figures, and 1 table.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering)

SUBMITTED: 00

SUB CODE: ME   NO REF SOV: 004

ENCL: 00

OTHER: 001

Card 2/2

FILLIPOV, G.A. kand. tekhn. nauk; VAN CHZHUN-TSI [Wang Chung-ch'i]

Effect of curls in the flow on the characteristics of nozzle lattices. Teploenergetika 11 no.5:54-57 My'64.   (MIRA 17:5)

1. Moskovskiy energeticheskiy institut.